## Pyrrhalta viburni (Paykull) (Col.: Chrysomelidae) breeding on Viburnum tinus

On 16 September 2000, I observed some foliar damage to a *Viburnum tinus*, an evergreen shrub often known as Laurustinus, growing in a town garden at Pershorc, Worcestershire (OS grid reference SO 94), and noted six static examples of *Pyrrhalta viburni* on it. The evidence strongly suggested that the shrub was a host-plant of *P. viburni*. This was confirmed on 3 June 2001, when 42 mature larvae of *P. viburni* were counted on the leaves. I had assumed during 2000 that this instance of utilisation of *V. tinus* by *P. viburni* was novel, but this may not have been so; a reference in *The Garden* (127(6):483) during 2002 implies that this may have been part of a wider trend in English gardens.

The damage caused by the larvae was noticeable, and consisted of extensive series of "shot-holes" and some larger perforations, with skeletonisation of the leaf apparent for some distance around the actual perforations. The damage is persistent and would be regarded by most people as unsightly, the damaged areas becoming discoloured during the growing season. Damage also occurred to leaves prior to their unfolding, so that the visible effects were later compounded. The larvae generally remain concealed on the leaf undersides, and damage to the plant, measuring  $2m \times 1m$ , during 2002 was such that its vigour was rather reduced.

This observation raises a number of interesting questions. Host plants of *P. viburni* are usually given exclusively as either Guelder Rose *Viburnum opulus* or Wayfaring Tree *Viburnum lantana*. It may also occur on the Snowball Tree *Viburnum opulus* "Roseum," a sterile plant of cultivation, since Warchalowski (1994, Chrysomelidae 4, *Fauna Polski* 16) refers to this as a host plant. There is no difficulty in explaining the arrival of *P. viburni* on the *V. tinus*, since examples have been observed in flight over Pershore town (Whitehead, pers. obs.) and *V. opulus* is a characteristic plant of local ancient woodlands.

Viburnum tinus is a sclerophyllous shrub of up to 3.5m in height, but often no more than 1.5m in its native woodlands around the fringes of the Mediterranean Sea-basin. Warchalowski (op. cit.) mapped the European range of P. viburni, which overlaps with that of V. tinus in the French Maritime Alps; the beetle-plant association seems not to have been recorded there. According to Loudon (1844, Arboretum et Fruticetum Britannicum 2, Longman Brown Green & Longmans, 1256 pp.) Viburnum tinus was introduced into Britain as an ornamental plant in 1596, so there has been plenty of time for the association to develop here. At the present time, I have not been able to find other examples of this beetle-plant association in the immediate area, although when the original host-plant was dug out during January 2003, an example of the cultivated Viburnum tinus "Gwenllian" planted during 2001 and some 4m distant, also revealed evidence of leaf damage caused by larval P. viburni. Viburnum tinus is increasingly seen as a naturalised plant in England (Preston, C.D., Pcarman, D.A. & Dines, T.D. (eds.) 2002, New atlas of the British and Irish flora. Oxford, 910 pp.), which may also bulk up rapidly by layering, so that the opportunity exists for this association to develop yet more widely.

The difference in leaf texture and structure between *V. opulus* and *V. tinus* is substantial and one wonders whether the ability of the larvae to succeed in this way will result in particular structural adaptations to them.

Finally, a matter which may perhaps have been overlooked. *Pyrrhalta* Joannis, 1866 is closely related to *Galerucella* Crotch, 1873, some of which are *Salix*-associated; in most checklists they are placed consecutively. In terms of molecular phylogeny Caprifoliaceae is apparently far removed from Salicaceae, yet *Viburnum* may contain Salicin (Trease, G.E. & Evans, W.C., 1972. *Pharmacognosy*. Ballière Tindall, London. viii, 794 pp.), which may have some bearing on the utilisation of *Viburnum* by *P. viburni.*– P. F. WHITEHEAD, Moor Leys, Little Comberton, Pershore, Worcestershire WR10 3EH (E-mail: paul@moorleys.freeserve.co.uk).

## A December record of *Wesmaelius subnebulosus* (Stephens) (Neur.: Hemerobiidae) in Hertfordshire

It was unseasonably mild on 22 December, 2002, with temperatures exceeding 15°C (59°F). In the morning we observed a Peacock butterfly *Inachis io* flying in Tewin churchyard, in central Hertfordshire. The mild weather was further evidenced by our moth catch that evening which included in excess of 100 Winter Moths *Operophtera brumata*, two Satellites *Eupsilia transversa*, and a Pale Brindled Beauty *Apocheima pilosaria*, a species not normally seen here before February. Most unusual, however, was an active specimen of the brown lacewing *Wesmaelius subnebulosus*.

Our records for Digswell show that adults appear in early spring, peak in late July through August, and occur continually into late autumn. The previous latest record we have is 16 October. Plant (1994. *Provisional atlas of the lacewings and allied insects (Neuroptera, Megaloptera, Raphidioptera and Mecoptera) of Britain and Ireland)*, notes that "This species has a long season occurring from late March to early November, but with a definite peak in July and August" and there are no literature references of this species overwintering as an adult. However, at a later date Plant (2001. *London Naturalist* **80** (Suppl.): 159-167) records a single (live) adult female inside a curled plane tree leaf caught up in a shrubbery in Buckingham Palace Garden, central London, on 21 February 2000 and notes that this appeared to be the first record of this species over-wintering as an adult in Britain.

Our own December record fuels the debate as to whether or not small numbers of this species hibernate in the adult phase. Large, curled leaves, caught up in bushes, where they are relatively protected from the frost and certainly protected from waterlogging, are the "natural" hibernation sites of the common green lacewing *Chrysoperla carnea* and its segregate siblings (Colin Plant, pers. comm.) and so it is no surprise that this is where the first example of an overwintering *Wesmaelius subnebulosus* was found by Colin. Perhaps carcful searching of this micro-habitat may reveal more over-wintering insects?– TOM and JANET GLADWIN, 99 Warren Way, Digswell, Welwyn, Hertfordshire AL6 0DL.